

i. Proposal number:# 2001-C211*

ii. Short proposal title .# Merced River Ranch Restoration: Next Phase Project*

APPLICABILITY TO CALFED ERP GOALS AND IMPLEMENTATION PLAN

1a1. Link to ERP Strategic Goals: What Strategic Goal(s) is /are addressed by this proposal? List the letter(s) of all that apply.

A. At-risk species

B. Rehabilitate natural processes

C. Maintain harvested species

D. Protect-restore functional habitats

E. Prevent non-native species and reduce impacts

F. Improve and maintain water quality#3 pts. The proposed project could make incremental contributions to Strategic Goals A (at-risk species); B (rehabilitate natural processes); C (maintain harvested species-fall-run chinook); and D (protect/restore functional habitats). The proposed project could potentially represent an impact to Goal F (improve and maintain water quality), since the use of dredged sediments/mine tailings always raises the issues of mercury sources, transportation, and fate. The project proponents should be alert to potential mercury issues and incorporate appropriate monitoring into the project design.*

1a2. Describe the degree to which the proposal will contribute to the relevant goal. Quantify your assessment and identify the contribution to ERP targets, when possible.# 3 pts. It is difficult to assess the potential contribution of the proposed project to ERP goals and objectives because the proposal is so unspecific. For example, the conceptual model offered in Figure 6 of Appendix D is a general construct of how a river operates, rather than a conceptual model that describes the more specific value of the proposed project. Similarly, the proposal does not clearly estimate a design flow for the channel-floodplain reconstruction; consequently, the proposal offers little idea of how much material will be moved. Nor does the proposal clearly estimate the volume of dredge tailings available as material for project construction or spawning gravel augmentation. These are all questions that can be answered with some basic homework, especially in light of the studies and restoration planning occurring for the Merced River. The proposal suggests that the proponents have some of this data available (Page 5, Task1, paragraph 2) which would facilitate revising the proposal for future submission.

If the project were designed properly, it could make an incremental contribution to Strategic Goal A (at-risk species) and Goal C (harvested species) by providing better spawning conditions for fall-run chinook. The project could also provide some good habitat for other terrestrial sensitive species by creating a nice continuum of habitat, from SRA to upland. Similarly, If the project were designed properly, it could contribute to Goal B (rehabilitate natural processes) and D (protect/restore functional habitats) by increasing channel-floodplain connectivity and restoring

sediment routing through the reach. However, these are all big "Ifs" since the proposal's description of the project is so unspecific.

Using the very general description of the project in the proposal, the project might make an approximate 5% contribution to Stream Meander Target 1 for SJ basin tribs (50 acres of a target of 1,000 acres cumulative of all 3 SJ tribs). The project could also make an approximate 10% contribution to Stream Meander Target 2 (3600 ft of a target of 5 to 7 miles of degraded stream on Merced). Such contributions are dependent upon a good design of the project.*

1b. Objectives: What Strategic Objective(s) is/are addressed by this proposal? List Objective (from the table of 32 objectives) and describe potential contribution to ERP Goals. Quantify your assessment, when possible. # 3 pts. It is difficult to quantify, or even estimate, the proposed project's contribution to Strategic Objectives because of the lack of specificity of the proposal. If designed properly, the Project could make incremental contributions to Objectives 1-1 (recovery/restoration of fall-run chinook); Objective 1-3: (riparian and seasonal wetland plant communities, neotropical migratory birds, terrestrial biotic assemblages); Objective 1-4 (amphibians such as western pond turtle); Objective 2-5: (scaling channel to regulated flow regime); Objective 2-6: (restoration of channel-floodplain connectivity and processes); Objective 3-1 (fall-run chinook harvest); and Objective 4-2 (restore riparian, wetland, aquatic habitats).*

1c. Restoration Actions: Does the proposal address a Restoration Action identified in Section 3.5 of the PSP? Identify the action and describe how well the proposed action relates to the identified Restoration Action. # The project does match the description of channel-floodplain reconstruction projects in Section 3.5 of the PSP. However, the proposal only weakly fulfills an important requirement described in the PSP: "proposed channel-floodplain reconstruction projects should clearly articulate a conceptual model explaining how the proposed channel-floodplain geometry will restore ecosystem function within the context of the regulated flow regime . . ." The conceptual model offered in Figure 6 of Appendix D is insufficient to explain the rationale of the project-it's an overly generalized conception of how a river functions, rather than a model of how the proposed project would address a need. The conception for this project is still quite fuzzy, demonstrated most by the conceptual model offered in Figure 6. The project proponents should be encouraged to revise their conceptual model to focus more specifically on the proposed project, and re-submit the proposal in the next PSP.*

1d. Stage 1 Actions: Is the proposal linked directly, indirectly or not linked to proposed

Stage 1 Actions? If linked, describe how the proposal will contribute to ERP actions during

Stage 1.# The proposed project is not directly linked to a Stage 1 action. However, the purpose of the project-to restore geomorphic function and enhance salmon production-mirrors that of the Stage 1 action for the Merced to isolate mining pits.*

1e. MSCS: Describe how the proposal is linked to the Multi-Species Conservation Strategy and if it's consistent with the MSCS Conservation measures. Identify the species addressed and whether the proposal will "recover", "contribute to recovery" or "maintain" each species.# As with the Strategic Goals and Objectives, it is difficult to estimate the projected benefits of the project to sensitive species because of the proposal's lack of specificity. The proposed project could make incremental contributions to several aquatic and terrestrial sensitive species, but as written, the proposal does not provide enough detail to sufficiently judge the scope of such contributions. Again, the design of the project will be critical in determining the contributions made toward MSCS goals. If the proposal is recommended for funding, it should be for partial/staged funding with peer review organized by CALFED.*

1f. Information Richness/Adaptive Probing related to the proposal: Describe the degree to which the proposal provides information to resolve one of the 12 scientific uncertainties (Section 3.3 of the PSP), and whether the proposal offers a prudent approach to answer these uncertainties.# If designed and monitored properly, the proposed project (like almost any other channel-floodplain reconstruction project) could provide a valuable opportunity to test hypotheses about process-habitat-species relationships and biological responses to process and habitat restoration. The articulated hypotheses in the proposal are very general and weak; they say little about testing assumptions ingrained in a project like this-that fish, bird, amphibian species will benefit from restoring processes and habitat. The insufficiencies of the conceptual model and the articulated hypotheses emphasize the need for expert peer review of the conceptual design of the project, if it were to be selected for funding. If funded, CALFED should organize this peer review (probably best through UC Davis) rather than leaving it to project proponents.*

1g. Summarize comments from section 1a through 1f related to applicability to CALFED goals and priorities. Identify the strengths and weaknesses of the proposal, highlighting the applicability of the proposed project to CALFED and CVPIA goals and priorities. Focus on aspects of the proposal that may be important to later stages in the project review and selection process.

4 pts. The level of detail in the proposal does not instill confidence that the proponents have a clear enough idea of the project to warrant a multi-million dollar investment. Nor does the proposal demonstrate a clear enough conception to fund the (rather expensive) restoration planning (Phase II). Project proponents should be encouraged to re-submit the proposal in the next PSP and demonstrate a clearer conception of the project, including an estimate for a design flow, an estimate of the amount of material required for implementation, an estimate of the volume of dredger tailings available for the project or future gravel augmentation, etc. The project proponents should also be encouraged to revise their conceptual model so that it more clearly describes the benefits of the proposed project rather than a general model of how a river is supposed to operate. Such revisions can add specificity to the proposal, which will facilitate a clearer evaluation of the proposed project's contribution to ERP Strategic Goals and Objectives.

CALFED has funded numerous channel-floodplain reconstruction projects over the past few years, but few have been implemented (Clear Creek and Merced-Ratzlaff) to date. We still do not know what processes, habitat, and species benefits we gain for these relatively expensive projects—we have yet to learn anything from the tens of millions of dollars spent on these types of projects. Consequently, it is difficult to estimate the ecosystem benefits of the proposed project. The channel-floodplain reconstruction projects that CALFED has funded thus far have been slow to be implemented (only Clear Creek Phase II A and Ratzlaff Reach are in the ground) for various reasons. And some of the channel-floodplain restoration projects have had significant cost overruns because of inaccurate estimates of the fill material required for implementation and cost overruns associated with increases in the per-unit cost of fill material. Considering such complications with these types of projects, it is disturbing that the proposal makes no estimate of the amount of material that will be moved, that is available on site, or that will need to be purchased.

If this project is to be recommended for funding by the Selection Panel, I would suggest providing only a portion of funding, followed by peer review of the conceptual design, with future funding contingent upon approval of the design.*

APPLICABILITY TO CVPIA PRIORITIES

1i. Describe the expected contribution to natural production of anadromous fish. Specifically identify the species and races of anadromous fish that are expected to benefit from the project, the expected magnitude of the contribution to natural production for each species and race of anadromous fish, the certainty of the expected benefits, and the immediacy and duration of the expected contribution. Provide quantitative support where available (for example, expected increases in population indices, cohort replacement

rates, or reductions in mortality rates).# The project is consistent with Merced River Action 3 of the 1997 Revised Draft Restoration

Plan for the AFRP, which reads: Improve watershed management to restore and protect instream and riparian habitat, including consideration of restoring and replenishing spawning gravel." If the pilot restoration of 60 acres (3,600 lineal feet) of stream through the dredger tailing reach of Merced River Ranch is implemented there would be benefits to the San Joaquin fall-run chinook salmon. However, the proposal does not state what the current value of spawning and rearing habitat of this reach is so the magnitude of benefit is hard to estimate. However, IF the intended benefit of re-established ecological function through a highly disturbed section of river, is realized, this pilot project would likely provide considerably more spawning and rearing salmon habitat than currently exists in this reach of river. Implementation is likely 3-years off, at which time benefits for fall-run chinook salmon would start to accrue, and these benefits should be durable due to the functional objective of the project.*

1j. List the threatened or endangered species that are expected to benefit from the project. Specifically identify the status of the species and races of anadromous fish that are expected to benefit from the project, any other special-status species that are expected to benefit, and the ecological community or multiple-species benefits that are expected to occur as a result of implementing the project.# If successful, this pilot project could provide considerable benefits to the fall-run chinook

salmon and the steelhead trout currently listed as threatened under the ESA through the restoration of important river and floodplain ecological functions and process. The Merced River Ranch property is in upper section of the lower Merced River that tends to have more favorable water temperatures compared to other downstream habitats. Other potential ecological community benefits from recreating a properly functioning channel, floodplain, and associated upland habitats through extraction and reconfiguration of stockpiled dredger tailings include the potential to increase native riparian and upland plant communities that could also potentially benefit the valley elderberry longhorn beetle, riparian brush rabbit, riparian woodrat, San Joaquin pocket mouse, least Bell's vireo, little willow flycatcher, western yellow-billed cuckoo, Swainson's hawk, and osprey. Another important contribution of the project would be the development of a reclamation/restoration strategy that could be used by others who are interested in restoring dredger tailing property.*

1k. Identify if and describe how the project protects and restores natural channel and riparian habitat values. Specifically address whether the project protects and restores natural channel and riparian habitat values, whether the project promotes natural processes, and the immediacy and duration of benefits to natural channel and riparian habitat values.# The cornerstone of the project is to reconstruct a currently dysfunctional dredger tailing section of river into a properly functioning river, floodplain, terraced upland habitat. The intent is to scale the pilot restoration design to conform to contemporary hydrology and hydraulic setting. This in turn would re-establish critical physical and biological processes that would re-establish and maintain natural channel and riparian habitat values in order to maintain and improve habitats for important biological resources.*

1l. Identify if and how the project contributes to efforts to modify CVP operations. Identify the effort(s) to modify CVP operations to which the proposed project would contribute, if applicable. Efforts to modify CVP operations include modifications to provide flows of suitable quality, quantity, and timing to protect all life stages of anadromous fish as directed by Section 3406 (b)(1)(B) of the CVPIA, including flows provided through management of water dedicated under Section 3406(b)(2) and water acquired pursuant to Section 3406(b)(3).# This project has a linkage to Section 3406(b)(3). To accrue maximum benefit from the restored floodplain, the use of channel maintenance flows over and above what could be achieved through existing flow requirements may be needed. Water could be acquired to mobilize bed surfaces and inundate floodplain surfaces to better mimic the historical hydrograph.*

1m. Identify if and how the project contributes to implementation of the supporting measures in the CVPIA. Identify the supporting measure(s) to which the proposed project would contribute, if applicable. Supporting measures include the Water Acquisition Program, the Comprehensive Assessment and Monitoring Program, the Anadromous Fish Screen Program, and others.# The project could provide information that would benefit Section B(13) of the CVPIA, the gravel restoration program. Using dredger tailings as a source of instream and floodplain restoration material could provide the dual benefits of an additional source of stream restoration material while at the same time helping to restore the area from which the material is mined. Currently, programs such as the Gravel Restoration Program rely on restoration materials from active floodplain pit mines that may ultimately further degrade floodplain habitats and limits the restoration potential in the future. This project could also contribute to implementation of CVPIA Section of 3406 (b)(1), which states, "...to make all reasonable efforts to address other identified adverse environmental impacts of the Central Valley Project not specifically addressed elsewhere in the Statute", by providing a diversity of floodplain habitats that would potentially benefit other listed species and species of concern such as: the valley elderberry longhorn beetle, riparian brush rabbit, riparian woodrat, San Joaquin pocket mouse, least Bell's vireo, little willow flycatcher, western yellow-billed cuckoo, Swainson's hawk, and osprey.*

1n. Summarize comments from section 1i through 1m related to applicability to CVPIA priorities (if applicable, identify the CVPIA program appropriate to consider as the source of CVPIA funding [for example, the Anadromous Fish Restoration Program, Habitat Restoration Program, Water Acquisition Program, Tracy Pumping Plant Mitigation Program, Clear Creek Restoration Program, Comprehensive Assessment and Monitoring Program, and Anadromous Fish Screen Program]). Identify the strengths and weaknesses of the proposal, highlighting the applicability of the proposed project to CALFED and CVPIA goals and priorities. Focus on aspects of the proposal that may be important to later stages in the project review and selection process.# The project most appropriately would be funded by the AFRP. It is consistent with Merced River Action 3 of the 1997 Revised Draft Restoration Plan for the AFRP. The action has the potential to provide lasting benefits to anadromous

salmonids that inhabit the lower Merced River by focusing on restoration of natural channel and riparian habitat values through a dredged out section of river and floodplain. Also, funding provided pursuant to Section B(13), the Gravel Restoration program and the B(1)other program could also justify funding consideration because the project could serve as a model for mine tailing restoration that could be applied on CVP-controlled stream, and because of the collateral benefits to other riparian dependent species listed previously in this review section, respectively.*

RELATIONSHIP TO OTHER ECOSYSTEM RESTORATION PROJECTS

2a. Did the applicant explain how the proposed project relates to other past and future ecosystem restoration projects, as required on page 57 in the PSP? Type in yes or no.#yes*

2b. Based on the information presented in the proposal and on other information on restoration projects available to CALFED and CVPIA staff, describe how the proposed project complements other ecosystem restoration projects, including CALFED and CVPIA. Identify projects or types of projects that the proposed project would complement, now or in the future.

Identify source of information.#Implementation of the pilot restoration project on Merced River Ranch is supported by the Merced River Ranch Stakeholder Group and TAC and further tests hypotheses developed as part of the Merced River Ranch Corridor Restoration Project and complements other work in the Watershed. Findings here will help guide and assist Merced County Planning effort.*

RESULTS AND PROGRESS ON PREVIOUSLY FUNDED CALFED AND CVPIA PROJECTS, INCLUDING REQUESTS FOR NEXT-PHASE FUNDING

3a1. Based on the information presented in the proposal and on project reports and data available to CALFED and CVPIA staff, has the applicant previously received CALFED or CVPIA funding? Type CALFED, CVPIA, both, or none.#CALFED*

3a2. If the answer is yes, list the project number(s), project name(s) and whether CALFED or CVPIA funding. If the answer is none, move on to item 4.#98C04 - Merced River Ranch Acquisition and Restoration.*

3b1. Based on the information presented in the proposal and on project reports available to CALFED and CVPIA staff, did the applicant accurately state the current status of the project(s) and the progress and accomplishments of the project(s) to date? Type yes or no.#yes*

3b2. If the answer is no, identify the inaccuracies:##

3c1. Has the progress to date been satisfactory? Type yes or no.#yes*

3c2. Please provide detailed comments in support of your answer, including source of information (proposal or other source):# Most DFG projects are underway and progressing. Work on Merced River corridor that is the basis for this proposal is progressing well.*

REQUESTS FOR NEXT-PHASE FUNDING

3d1. Is the applicant requesting next-phase funding? Type yes or no.#yes.*

3d2. If the answer is yes, list previous-phase project number(s) here. If the answer is no, move on to item 4.#98C04 - Merced River Ranch Acquisition and Restoration.*

3e1. Does the proposal contain a 2-page summary, as required on pages 57 and 58 of the PSP? Type yes or no.#yes.*

3e2. Based on the information presented in the summary and on project reports available to CALFED and CVPIA staff, is the project ready for next-phase funding? Type yes or no.#yes.*

3e3. Please provide detailed comments in support of your answers, including source of information (proposal or other source):#Phase 1 was acquisition and property has been appraised, an offer made and agreed to and now awaiting signatures of co-owners. Will submit acquisition to Public Works Board for approval in June 2000. Source: Proposal, quarterly reports*

LOCAL INVOLVEMENT

4a. Does the proposal describe a plan for public outreach, as required on page 61 of the PSP? Type yes or no.# Yes*

4b. Based on the information in the proposal, highlight outstanding issues related to support or opposition for the project by local entities including watershed groups and local governments, and the expected magnitude of any potential third-party impacts.# The proponents provide support from local interests for the need of such a project. The proposal concept has also been presented within the Merced River Stakeholder forums, however, the specifics have not. This project could provide positive third party impacts if a generic framework for reclamation of dredger tailing sections of Central Valley rivers is one of the outcomes. This could also lead to the permitting of dredger tailing aggregate reserves that could provide benefits to river

restoration without competing with other beneficial uses of aggregate material or further degrading floodplain habitats, thus benefitting a broader stakeholder constituency.*

ENVIRONMENTAL COMPLIANCE

4d. List any potential environmental compliance or access issues as identified in the PSP checklists.# Project proponent should obtain a Grading Permit from the County.*

4e. Specifically highlight and comment on any regulatory issues listed above that may prevent the project from meeting the projected timeline.# None*

COST

5a. Does the proposal include a detailed budget for each year of requested support? Type yes or no.#Yes*

5b. Does the proposal include a detailed budget for each task identified? Type yes or no.#Yes*

5c. Is the overhead clearly identified? Type yes or no.#Yes, overhead is at 141.87% and includes indirect labor, administrative, financial, legal, facility costs, internal services, telephone/utilities, insurance/permits, travel/relocation, operating expenses, and fees*

5d. Are project management costs clearly identified? Type yes or no.#Yes*

5e. Please provide detailed comments in support of your answers to questions 5a - 5d.#All information requested has been provided by project proponent in a clear, concise, and understandable format.*

COST SHARING

6a. Does the proposal contain cost-sharing? Type yes or no.#Yes*

6b. Are applicants specifically requesting either state or federal cost share dollars? Type state, federal, or doesn't matter.#Doesn't matter*

6c. List cost share given in proposal and note whether listed cost share is identified (in hand) or proposed.

6c1. In-kind:#n/a*

6c2. Matching funds:#n/a*

6c3. Show percentage that cost sharing is of total amount of funding requested along with calculation.#CVPIA: 50,000 dollars or 9.3% of requested funding for Phase II only*

6d. Please provide detailed comments in support of your answers to questions 6a - 6c3.#All information requested has been provided by project proponent in a clear, concise, and understandable format.*